

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. 10/648,029

Confirmation No. 2417

Applicants Kenneth KLEDZIK, et al.

Filed 26 August 2003

TC/Art Unit 2814

Examiner N. Ha

Docket No. 009.2005

Customer No. 49837



DECLARATION OF MICHAEL CHABOT UNDER 37 CFR § 1.131

Commissioner for Patents
Alexandria, VA 22313-1450

Sir:

I, Michael Chabot, declare the following:

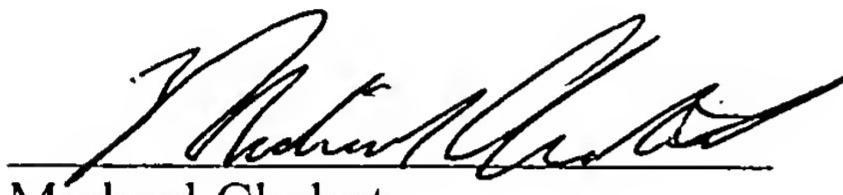
1. While employed by Legacy Electronics I worked with Kenneth Kledzik implementing manufacturing processes for various electronic modules, including carriers.
2. I have read and I am familiar with the above-identified patent application, serial No. 10/648,029, which I understand is a continuation of an earlier application filed by Legacy Electronics on 16 October 2000 that became US Patent 6,713,854.
3. I understand that Kenneth Kledzik and Jason Engle are the named inventors on this patent application.
4. I attest that prior to 19 May 2000, under the direction of Kenneth Kledzik, I was asked to assist with implementing certain manufacturing processes for making certain carriers like those described in certain portions of the present patent application. Example carrier designs that we contemplated, prior to 19 May 2000, included a carrier with a ball grid array for connection with a circuit board, mounting pad locations located on the top of the carrier, a recess in the carrier, at least one IC package coupled with the carrier, and an interconnection array conductively

coupling IC package mounting pad locations with a circuit board.

5. Exhibit A shows 2 pages of notes I prepared while implementing certain manufacturing processes for making certain carrier designs and assemblies that are the subject of the above referenced patent application. This document was prepared prior to 19 May 2000 and bears a date prior to 19 May 2000 (actual earlier dates redacted, *see* MPEP §715.07). This document supports my recollection that prior to 19 May 2000 I was working on a process to manufacture certain carriers, which are disclosed in the present patent application. Exhibit B is a copy of the notes with specific drawings circled for easier identification.
6. Circled on page 1 of Exhibit B is a drawing I made of a carrier with a ball grid array and two IC packages attached to the top and the bottom of the carrier. I recall that the carrier represented by the drawing also included an interface and mounting pad arrays for the IC packages. I recall that the carrier interface and the mounting pad arrays were conductively bonded. I also recall that the carrier included an interface between the carrier and connection pads on a circuit board to which it may be attached.
7. Circled on page 2 of Exhibit B is another drawing I made of a carrier with a mounting pad array, a ball grid array and a recess within the carrier. The drawing also shows an IC package connected to the top of the carrier and another beneath the carrier. I recall that the recess in the carrier in this drawing was designed for an IC package to fit on a circuit board beneath the carrier. I also recall that the carrier included a mounting pad array coupled with a carrier interface and the carrier's ball grid array was also coupled with the carrier interface.
8. The IC packages shown in the drawings circled on pages 1 and 2 include a body and ball grid array connectors. I recall that the ball grid arrays on the IC packages were conductively bonded to the mounting pad arrays on the carrier.
9. I further attest that I continued to work with Kenneth Kledzik on implementing a process to produce the invention at least until Legacy began working on the patent application that was filed on 16 October 2000, from which the present application derived.
10. My notes described above were prepared in California. Similarly, the work I performed on these carriers to implement manufacturing processes for the carrier was done in California.

Declaration of Mike Chabot

11. All statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that the statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and such willful false statements may jeopardize the validity of the application or any patents issuing thereon.



Michael Chabot

11-Feb-2006

Date